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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,154	03/11/2005	Tatsuo Akai	0020-5309PUS1	9169
2292 7590 03/03/2008 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				
EXAMINER				
HWU, JUNE				
ART UNIT		PAPER NUMBER		
1661				
NOTIFICATION DATE		DELIVERY MODE		
03/03/2008		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

### Office Action Summary

**Application No.**

10/511,154

**Applicant(s)**

AKAI ET AL.

**Examiner**

JUNE HWU

**Art Unit**

1661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3, 5-7, 9-15, 17 and 19-24 is/are pending in the application.
- 4a) Of the above claim(s) 1, 2, 9-15, 21-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 3, 5-7, 17, 19, 20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB08)  
Paper No(s)/Mail Date 5/16/06
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ ~~Notice of Informal Patent Application~~
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

The amendment filed on December 6, 2007 is acknowledged and entered.

The text of those sections of Title 35, U.S. Code not included in this action can be found in the prior Office action.

### ***Status of the Claims***

Claims 4, 8, 16 and 18 are cancelled; claims 1, 2, 9-15 and 21-24 are withdrawn; claims 3, 5-7, 17 and 19-20 will be examined on the merits.

The rejection of claims 21-24 under 35 U.S.C. 112, second paragraph is withdrawn due to Applicants amendment of the claims.

### ***Claim Rejections - 35 USC § 103***

Claims 3, 5-7, 17 and 19-20 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Akai (U.S. Patent No. 6,315,678 B1) in view of Harrison et al (WO 00/63400).

Applicants' arguments filed December 20, 2007 have been fully considered but they are not persuasive.

Applicants urge that Akai or Harrison et al do not teach that the apparatus of the present invention cultivates and transform simultaneously a plurality of plants supported by a plurality of microporous bodies which are removably held by a holding means as set forth in claim 3 (p. 18 or reply).

This is not found persuasive because Akai has taught an apparatus, wherein the holding means may be removed. Fig. 3 shows a plurality of microporous bodies holding at least two plants. To remove the microporous bodies (10, 22), one would disconnect the water supply rope (22) to replace a plant, thus the holding means is removable. Moreover, Fig. 8 shows a plural rod-like projection (51) that is supported on a plate (50), wherein the rod-like projections

may be removed such as when the rod-like projections are fired separately and placed on the plate later (col. 8, lines 5-12).

Applicants urge that Akai and Harrison et al taught the elements, function and effect of the instant application, because Harrison et al teach direct gene transformation by forming a plant and contacting it with *Agrobacterium* (p. 18 of reply).

This is not found persuasive because Akai taught a system of growing plants comprising of a plurality of microporous bodies, wherein a seed is germinated and grown into a plant and the holding means is removable and the plant seed absorbs an aqueous nutrition. Harrison et al was combined with Akai to show that plants can be transformed by immersing the plant in *Agrobacterium*.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Correspondence***

Art Unit: 1638

Any inquiry concerning this communication or earlier communications from the examiner should be directed to June Hwu whose telephone number is (571) 272-0977. The Examiner can normally be reached Monday through Thursday from 6:00 a.m. to 4:30 p.m.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Anne Marie Grunberg, can be reached on (571) 272-0975. The fax number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JH

/Anne R. Kubelik/

Primary Examiner, Art Unit 1638